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| 09/688,456 | 10/16/2000 | Craig L. Ogg | 39778/RRT/S850 | 1637 |
| 23363 | 7590 | 03/25/2005 | EXAMINER | |
| CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068 | | | BACKER, FIRMIN | |
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| | | | 3621 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/688,456

Applicant(s)

OGG ET AL.

Examiner

Firmin Backer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 10th, 2005 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehouse (U.S. Patent No. 6,005,945) in view of Leon (U.S. Patent No. 6,424,954).

3. As per claim 1, Whitehouse teaches a cryptographic device (*secure central computer, 102*) for securing data (*postal information*) on a computer network (*network 100, fig 3, 4*) comprising a processor (*postal authority computer for processing, 180*) programmed to authenticate (*authenticate*) a plurality of users (*users, 104*) on the computer network (*network 100, fig 3, 4*) for secure processing of a value bearing item (*postal indicium, fig 2*) (*see*

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abstract, figs 2, 3, 4), a memory (*memory, 154*) for storing (*stores*) security device transaction data (*records*) for ensuring authenticity of a user, wherein the security device transaction data is related to the one of the plurality of users a cryptographic engine (*cryptographic key*) for cryptographically protecting data and an interface (*interface, 152, 112, 252*) for communicating with the computer network (*see abstract, fig 4, 7, column 8 lines 54-8 line 63*).

Whitehouse fails to teach an inventive concept of a module for processing value for the value bearing items plurality of cryptographic device that share a secret key and is capable of authenticating any of the plurality of remote user. However, Leon teaches an inventive concept of a module for processing value for the value bearing items and a plurality of cryptographic device that share a secret key and is capable of authenticating any of the plurality of remote user (*see abstract, fig 6, 7, 9, and their accompanied text*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Whitehouse's inventive concept to include Leon's inventive concept of a module for processing value for the value bearing items plurality of cryptographic device that share a secret key and is capable of authenticating any of the plurality of remote user because this would have prevent mail piece from being short paid for its weight and destination and would enhance the security of the system.

4. As per claims 2, Whitehouse teaches the inventive concept as stated in claim 1.

Whitehouse fail to teach a cryptographic device and a method wherein the processor is programmed to verify that the identified user is authorized to assume a role and perform a corresponding operation. However, Leon teaches a cryptographic device wherein the processor

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is programmed to verify that the identified user is authorized to assume a role and perform a corresponding operation (*see column 8 line 45-9 line 67*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Whitehouse's inventive concept to include Leon a cryptographic device wherein the processor is programmed to verify that the identified user is authorized to assume a role and perform a corresponding operation because this would have provided knowledge to the system as to which entity is using the system in order to determine which level of security is applicable.

5. As per claim 3-6, Leon teaches a cryptographic device wherein the assumed role is a key custodian role to take possession of shares of keys, an administrator role to manages a user access control database, is a provider role to authorize increasing credit for a user account a user role to perform expected IBIP postal meter operations (*see column 8 line 45-9 line 67*).

6. As per claim 7-9, Whitehouse teaches a cryptographic device further comprising a stored secret that is a password, a public/private key for cryptographically protecting data (*see column 8 lines 30-42, 9 lines 12-31, 10 lines 50-11 line 29, 12 lines 35-64*).

7. As per claim 10, Leon teaches a cryptographic device wherein the processor is programmed to include a state machine for determining a state corresponding to availability of commands in conjunction with the roles (*see column 8 lines 45-62*).

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8. As per claim 11-14, Whitehouse teaches a cryptographic device wherein the processor is stateless and is programmed to for preventing unauthorized disclosure of data and undetected modification of data, to ensure proper operation of cryptographic security and VBI related meter functions (*see abstract, figs 3, 4, 6 and 7, column 12 lines 35-64, 13 line 61-14 line 36*).

9. As per claims 15 and 16, Leon teaches a cryptographic device for providing indications of an operational state of a VBI meter, for supporting multiple concurrent users and maintaining a separation of roles and operations performed by each user (*see column 8 lines 45-62*).

10. As per claim 17, Whitehouse teaches a cryptographic device wherein the processor stores information about a number of last transactions in an internal register and compares the information saved in the register with the information saved in a memory before loading a new transaction data (*see column 13 lines 61-65, 14 lines 25-36, 21 lines 20-45*).

11. As per claim 18, Whitehouse teaches a cryptographic device wherein the memory includes data for creating indicium, account maintenance, and revenue protection (*see figs 4, and 7*).

12. As per claim 19-22, Whitehouse teaches a cryptographic device wherein the value bearing item is a postage value including a postal indicium comprises a digital signature and a postage amount, an ascending register of used postage and descending register of available postage (*see abstract, column 16 lines 25-38*).

13. As per claim 23-28, Whitehouse teaches a cryptographic device wherein the value bearing item that include a bar code is a ticket, a coupon, currency, a voucher, a traveler's check (*fig 2*).

14. As per claim 29, Whitehouse teaches a cryptographic device wherein each security device transaction data includes an ascending register value, a descending register value, a respective cryptographic device ID, an indicium key certificate serial number, a licensing ZIP code, a key token for an indicium signing key, user secrets, a key for encrypting user secrets, data and time of last transaction, last challenge received from a respective client subsystem, an operational state of the respective device, expiration dates for keys, and a passphrase repetition list (*see column 10 line 45-11 line 29, 20 line 16-40*).

15. As per claim 30, Whitehouse teaches a cryptographic device wherein the processor is capable of sharing a secret with a plurality of other cryptographic devices (*see column 9 line 32-50*).

16. As per claim 31-34, Whitehouse teaches a cryptographic device wherein the processor and the cryptographic engine generate a master key set (MKS) includes a Master Encryption Key (MEK) used to encrypt keys when stored outside the device, includes a Master Authentication Key (MAK) used to compute a DES MAC for signing keys when stored outside of the device and is exported to other cryptographic devices (*see column 23 line 41-67*).

17. As per claim 35, Whitehouse teaches a cryptographic device comprising a memory including a user profile for a subset of the plurality of users (*see column 10 line 45-11 line 29*).

18. As per claim 36, Whitehouse teaches a cryptographic device wherein the user profile includes username, user role, password, logon failure count, logon failure limit, logon time-out limit, account expiration, password expiration, and password period (*see column 10 line 45-11 line 29*).

19. As per claim 37, Whitehouse teaches a cryptographic device wherein the state machine comprises of an uninitialized state, an initialized state, an operational state, an administrative state, an exporting shares state, an importing shares state, and an error state (*see fig 6A, column 9 line 59-62*).

20. As per claim 38, Whitehouse teaches a cryptographic device wherein the operational state comprises means for access control, session management, key management, audit support (*see column 10 line 1-11 line 34*).

21. As per claim 39, Whitehouse teaches a cryptographic device wherein the cryptographic engine is programmed to perform one or more of Rivest, Shamir and Adleman (RSA) public key encryption, DES, Triple-DES, DSA signature, SHA-1, and Pseudo-random number generation algorithms (*see column 4 line 20-27, 16 lines 39-44, 23 lines 41-67*).

22. As per claim 40, Whitehouse teaches a cryptographic device wherein at least one of the plurality of users is an enterprise account (*see column 27 lines 27-45*).

23. As per claim 41, Whitehouse teaches a method for securing (*secure central computer, 102*) data (*postal information*) on a computer network (*network 100, fig 3, 4*) including a plurality of users (*customer/users, 104*) comprising authenticating (*authenticate*) and authorizing (*authorizing*) the plurality of users (*customer/users, 104*) for secure processing of a value bearing item (*postal indicium, fig 2*) (*see abstract, figs 2, 3, 4*), storing (*storing*) a security device transaction data (*cryptographic key record*) in a memory (*memory, 154*) for ensuring authenticity and authority of one of the plurality of users, wherein the security device transaction data is related to the one of the plurality of users and including cryptographically protected data using a stored secret (*key*) (*see abstract, fig 4, 7, column 8 lines 54-8 line 63*). Whitehouse fails to teach an inventive concept of a module for processing value for the value bearing items plurality of cryptographic device that share a secret key and is capable of authenticating any of the plurality of remote user. However, Leon teaches an inventive concept of a module for processing value for the value bearing items and a plurality of cryptographic device that share a secret key and is capable of authenticating any of the plurality of remote user (*see abstract, fig 6, 7, 9, and their accompanied text*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Whitehouse's inventive concept to include Leon's inventive concept of a module for processing value for the value bearing items plurality of cryptographic device that share a

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secret key and is capable of authenticating any of the plurality of remote user because this would have prevent mail piece from being short paid for its weight and destination and would enhance the security of the system.

24. As per claim 42, Whitehouse teaches a method of printing the value bearing item (*see figs 2, 5*).

25. As per claim 43, Whitehouse teaches a method of storing a plurality of security device transaction data related to one of the plurality of users (*see column 9 lines 12-31*).

26. As per claim 44, Whitehouse teaches a method of loading a security device transaction data related to the cryptographic device when the user requests to operate on a value bearing item (*see column 9 lines 12-31*).

27. As per claim 45 Whitehouse teaches the inventive concept as stated in claim 1. Whitehouse fail to teach a cryptographic device and a method wherein the processor is programmed to verify that the identified user is authorized to assume a role and perform a corresponding operation. However, Leon teaches a cryptographic device wherein the processor is programmed to verify that the identified user is authorized to assume a role and perform a corresponding operation (*see column 8 line 45-9 line 67*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Whitehouse's inventive concept to include Leon a cryptographic device wherein the processor

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is programmed to verify that the identified user is authorized to assume a role and perform a corresponding operation because this would have provided knowledge to the system as to which entity is using the system in order to determine which level of security is applicable.

28. As per claim 46-51, Leon teaches a cryptographic device wherein the assumed role is a key custodian role to take possession of shares of keys, an administrator role to manages a user access control database, is a provider role to authorize increasing credit for a user account a user role to perform expected IBIP postal meter operations (*see column 8 line 45-9 line 67*).

29. As per claim 52-55, Whitehouse teaches a method further comprising the step of printing a postage value including a postal indicium comprises a digital signature, a postage amount, an ascending register of used postage and descending register of available postage (*see column 16 lines 25-38*).

30. As per claim 56-61, Whitehouse teaches a method of printing a ticket, a bar code, a coupon, a currency, a traveler's check, a voucher (*see fig 2*)

31. As per claim 62, 63, Whitehouse teaches a method of storing a user profile includes username, user role, password, logon failure count, Logon failure limit, logon time-out limit, account expiration, password expiration, and password period for a subset of the plurality of users (*see column 10 line 45-11 line 29*).

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32. As per claim 64, Whitehouse teaches a method of performing one or more of Rivest, Shamir and Adleman (RSA) public key encryption, DES, Triple-DES, DSA signature, SHA-1, and Pseudo-random number generation algorithms by each of the cryptographic devices (*see column 4 line 20-27, 16 lines 39-44, 23 lines 41-67*).

33. As per claim 65, Whitehouse teaches a method of supporting multiple concurrent operators and maintaining a separation of roles and operations performed by each operator (*see fig 3*).

34. As per claim 66, Whitehouse teaches a method of storing information about a number of last transactions in a respective internal register of each of the one or more cryptographic devices, storing a table including the information about a last transaction in the database; and comparing the information saved in the respective device with the respective information saved in the database (*see column 10 line 45-11 line 29*).

35. As per claim 67, Whitehouse teaches a method of loading a new transaction data if the respective information stored in the device compares with the respective information stored in the database (*see column 22 line 36-53*).

36. As per claim 68-69, Whitehouse teaches a method therein the secret is a password, a public/private key pair (*see column 8 lines 30-42, 9 lines 12-31, 10 lines 50-11 line 29, 12 lines 35-64*).

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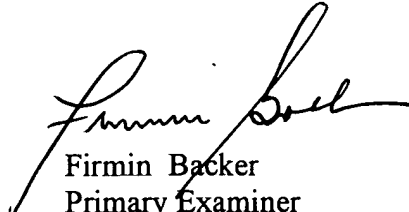
37. As per claim 70, Whitehouse teaches a method wherein at least one of the plurality of users is an enterprise account (*see column 27 lines 27-45*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Firmin Backer whose telephone number is (703) 305-0624. The examiner can normally be reached on Mon-Thu 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (703) 305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Firmin Backer
Primary Examiner
Art Unit 3621

March 20, 2005